

NWS FORM E-5 (11-88) (PRES. BY WSOM E-41)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) WFO Jackson, Mississippi
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR: MONTH YEAR April 2003
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE Alan Gerard, MIC In Charge of HSA DATE May 09th , 2003

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOME-41)

Synopsis...

The month of April was characterized by a series of weak frontal boundaries pushing into the state. These systems generally stalled over central sections of the Hydrologic Service Area or pushed back to the north as warm fronts. Most of the rainfall occurred during 2 separate rainfall events.

An influx of Gulf moisture and daytime heating over the HSA between the 4th and 5th allowed for scattered showers and thunderstorms. Rainfall amounts were generally less than .50 inches.

The most significant event of the month occurred between the 6th and 8th. A frontal boundary pushed into northeast Louisiana and central Mississippi and stalled. Strong thunderstorms with heavy rainfall developed along the stalled boundary. Rainfall amounts ranging from 5 to 12 inches fell along this boundary. The rainfall fell in a duration less than 18 hours on the 6th and early 7th. Rainfall over northern sections of Mississippi and southeast Arkansas had rainfall amounts ranging from 2 to 5 inches while southern Mississippi and southern portions of northeast Louisiana had rainfall from .10 to near 2.00 inches. The greatest rainfall totals for the 24 hours ending on April 7th were: 12.20 inches at Goshen Springs, MS; 11.90 inches at Conehatta, MS; 11.80 at Fannin, MS; 10.50 inches at Ross Barnett Reservoir; 10.25 inches at Vicksburg; 10.18 inches at Ridgeland, MS; 9.58 inches at Pat Harrison's Turkey Creek Water Park (near Decatur, MS); 9.53 inches at Topton, MS and 8.14 inches at Sondheimer, LA.

Several weak frontal systems pushed through the area between the 18th and 19th with little or no rainfall. Some strong storms pushed into the area ahead of another cold front on the 20th into the 21st. Rainfall mainly over northeast Louisiana and southeast Arkansas occurred with this frontal system. Rainfall amounts were generally around .50 inches or less.

On the 23rd into the 24th a warm front pushed north across the HSA ahead of an approaching upper-level disturbance. Heavy rainfall concentrated over the Upper Pearl River Basin and once again over the Upper Chickasawhay and southern portions of the Tombigbee Basin in Mississippi. Rainfall amounts over this area ranged from 2 to 9 inches. Rainfall over the remainder of

Mississippi, southeast Arkansas, and northeast Louisiana was substantially less. Rainfall amounts ranged from less than .25 inches over southwest sections to 3 inches over the middle Pearl River Basin. The heaviest rainfall amounts for this event were: 8.65 inches at Topton, MS; 8.26 inches at Collinsville, MS; 7.05 inches at Philadelphia, MS; 6.28 inches at Kipling, MS; 7.75 inches at Okatibbee Reservoir; 5.46 inches at Edinburg, MS.

River and Soil Conditions...

Soil moisture conditions began the month near normal. Soil moisture conditions during the month remained near normal with the exception of extreme east central Mississippi where soils remained slightly above normal and southwest Mississippi, southeast Arkansas, southern sections of northeast Louisiana where soils were below normal.

No flooding was reported in northeast Louisiana and southeast Arkansas. Most flooding in Mississippi during the month occurred during the heavy rain event of April 6th and 7th and the event of the 23rd and 24th.

The April 6th and 7th event produced flash flooding from northeast Louisiana into Vicksburg through the Jackson area to north of Meridian. Schools were closed in the Jackson Metropolitan area and in the Meridian area due to flooded streets. Numerous homes and businesses were flooded in the Jackson area and north of Meridian. Some bridges and many roads were washed out. The Highway 35 bridge, a major north south highway, on Tuscolameta Creek was severely damaged and will have to be replaced. 1 death occurred in Scott County when a person traveling along a road did not realize that the bridge had been washed out. Major flooding occurred on the upper Chickasawhay River where several preliminary flood of records occurred. The Chunky River crested at 27.32 feet breaking a record set in 1979 of 26.64 feet. The Chickasawhay River at Enterprise broke a record set in 1964 of 42.94 feet. The new preliminary record was 43.14 feet. Around 80 homes took on water in the Enterprise area in Clarke County according to press reports. Many residents were evacuated and some homes were flooded as water progressed downstream to Shubuta, MS. Flooding from Enterprise to Shubuta would have been much worse if this reach of the river had received heavy rainfall during the event. Moderate flooding was recorded on the Big Black River from West, MS to Bovina, MS. Moderate flooding also occurred on the entire Pearl River System. Tuscolameta Creek crested within a foot of the flood of record. The Pearl River at Jackson reached 35.15 feet which was similar to the flooding in mid February. Only minor flooding occurred in the Lower Yazoo River Basin along the Yalobusha River.

The April 23rd and 24th event affected mainly the Upper Pearl and Upper Chickasawhay basins. Flash flooding once again occurred in and north of Meridian (Central and northern Lauderdale County). Reports of roads washed out once again were common in this area. Flash flooding was reported in Neshoba County at the upper end of the Pearl. Moderate flooding occurred along the Upper Pearl River Basin above Carthage, MS. The Jackson gage remained below flood stage due to Ross Barnett capturing needed water for summer recreation on the lake.

With normal rainfall expected over the next several months and near normal soil moisture conditions, flood potential for HSA rivers should remain near normal over most areas with a slightly below normal potential over southwestern sections of Mississippi, southeast Arkansas and southern sections of northeast Louisiana. See the March E-3 report for specific information on flood crests.

Rainfall for the month of April...

<u>RIVER BASIN</u>	<u>RAINFALL</u>	<u>DEPARTURE FROM NORMS</u>
Southeast Arkansas (Chicot & Ashley counties)	2.50 to 3.75 inches	Much below normal.
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	4.00 to 9.00 inches northern sections 1.50 to 4.00 inches central sections 1.00 to 2.00 inches southern section	Near Normal to much above normal. Below to much below normal. Much below normal.
Lower Yazoo	3.75 to 11.50 inches	Below normal over northern sections of Lower Yazoo to much above normal over the extreme Lower Yazoo.
Big Black	3.00 to 7.00 inches upper section 7.00 to 9.00 inches lower and middle sections	Below normal to just above normal. Much above normal.
Homochitto/ Bayou Pierre	0.50 to 3.50 inches	Much below normal.
Pearl (abv Jackson)	8.00 to 15.00 inches	Much above normal.
Pearl (Blo Jackson)	2.00 to 5.00 inches	Below to much below normal.
Pascagoula	2.50 to 7.00 inches over the Leaf basin. 1.50 to 2.00 inches over the Black Creek basin. 4.50 to 18.00 inches over the Chickasawhay	Above normal over the upper basin to much below over the middle to lower basin. Much below normal. Much above normal in the upper basin to just below over the middle basin.

<i>Tombigbee tributaries in the JAN HSA</i>	<i>4.00 to 13.00 inches</i>	<i>Near normal to just below normal from Columbus to Macon. Much above normal over Kemper and northeast Lauderdale Counties.</i>
---	-----------------------------	--

The heaviest rainfall amounts in the HSA for the month were: 18.33 inches at Topton, MS; 17.07 inches at Collinsville, MS; 16.93 inches at Okatibbee Reservoir; 15.24 inches at Goshen Springs, MS; 14.78 inches near Little Rock, MS; 14.66 inches at Fannin, MS; 14.10 inches at Conehatta, MS; 14.78 inches at Pat Harrison's Turkey Creek Water Park, MS; 14.07 inches near Ridgeland, MS; 13.60 inches at Ross Barnett Reservoir Tower, MS; 12.25 inches at Philadelphia, MS; 11.51 inches at Satartia 8SW, MS.

Here at the Jackson WFO, the April monthly rainfall was 11.89 inches, which was 5.91 inches above normal. We have had 26.37 inches of rainfall through the end of April which was 4.48 inches above normal.

At the Meridian Airport, the April monthly rainfall was 10.25 inches, which was 4.63 inches above normal. Meridian had received 22.33 inches through the end of April which was 1.49 inches below normal.

Mississippi River...

The Mississippi River from Arkansas City, AR to Natchez, MS was well below seasonal norms during the month.

The provisional high and low stages for April are listed below:

<i>Location</i>	<i>High Stage(ft)</i>	<i>Date</i>	<i>Low Stage(ft)</i>	<i>Date</i>
<i>Arkansas City, AR</i>	<i>20.34</i>	<i>04/22</i>	<i>11.96</i>	<i>04/10</i>
<i>Greenville, MS</i>	<i>31.79</i>	<i>04/22</i>	<i>23.38</i>	<i>04/11</i>
<i>Vicksburg, MS</i>	<i>26.60</i>	<i>04/01</i>	<i>18.99</i>	<i>04/14</i>
<i>Natchez, MS</i>	<i>35.12</i>	<i>04/01</i>	<i>26.92</i>	<i>04/16</i>

Products issued...

Total Flood Warning products issued: 29

Total Flood Statement products issued: 146

Daily Rainfall Products (RRA'S) issued 30

Daily River Forecast Products (RVS'S) issued: 32

Daily River Stage products (RVA'S) issued 30

*Marty V. Pope
Service Hydrologist*

Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.

*cc: USGS Little Rock District
USGS Ruston District
USCE Mobile District
USCE Vicksburg District
USCE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
LMRFC
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District*